Dart Aerospace Ltd.

13

Date: Thursday, 3/13/2008 1:01:26 PM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206B FWD X-TUBE
Job Number	: 37980		
Estimate Number	: 13219		
P.O. Number	:	Part Number	: D206667101TRN
This Issue	: 3/13/2008 S.O. No. :	Drawing Number	: D206-667-141REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LANDING GEAR	Drawing Revision	: B
Previous Run	:	Material	:
Written By	:	Due Date	: 3/28/2008 Qty: 1 Um: Each
Checked & Approved By	: 080313		
Comment	: Est Rev:A 08-03-06 new issue DD verified by:ec		

Additional Product

Job Number:

Seq. #:	Machine Or Operation:	Description :
1.0	D6001105	Crosstube

Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D6001-105	Crosstube	B20115

Check OD = 2.250"; ID = 1.874"

BG 08.04.04

Seq. #:	Machine Or Operation:	Description :
2.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE

Comment: MORI SEIKI CNC LATHE LARGE

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA083

2-Turn first side as per Folio FA083

3-Deburr & Inspect for surface damage. BG 08.04.04 (1)

Seq. #:	Machine Or Operation:	Description :
3.0	QC1	INSPECT ALL DIM TO DIM SHEET

Comment: INSPECT ALL DIM TO DIM SHEET BG 08.04.04 (1)

Seq. #:	Machine Or Operation:	Description :
4.0	MORI SEIKI	MORI SEIKI CNC LATHE LARGE

Comment: MORI SEIKI CNC LATHE LARGE

1-Turn second side as per Folio FA083

2-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D206-667-141.

3-Remove sand and plugs

BG 08.04.04 (1)

Form: rprocess

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** __________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 3/13/2008 1:01:26 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services
Drawing Name: 206B FWD X-TUBE

Job Number: 37980
Part Number: D206667101TRN

Job Number:

Seq. #:	Machine Or Operation:	Description :
	4-Scribe part # and batch # using vibrating stylus as per Dwg D206-667-141 Inside of Cuff(Donot engrave on outside of tube)	
5.0	QC1	INSPECT ALL DIM TO DIM SHEET
	Comment: INSPECT ALL DIM TO DIM SHEET	BG 08.04.04 (1)
6.0	QC8	SECOND CHECK
	Comment: SECOND CHECK	08/04/04
7.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
	Comment: LANDING GEAR RESOURCE 1 1-Polish entire outside surface of crosstube	08/04/04
8.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
		AWM 8-4-7
	Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1	
9.0	QC3	INSPECT POWDER COAT/CHEMICAL CONVERSION
	Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION	BE 08-04-07
10.0	PACKAGING 1	PACKAGING RESOURCE #1
	Comment: PACKAGING RESOURCE #1 Identify and stock in kanban rack Location: X TUBE CELL	AWM 8-4-7
11.0	QC21	FINAL INSPECTION/W/O RELEASE
		08/04/09
	Comment: FINAL INSPECTION/W/O RELEASE	

Job Completion

mF 08-04-08

Form: mprocess

Dart Aerospace Ltd

W/O:	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: ____________________ **PAR #:** _______ **Fault Category:** _________________ **NCR:** Yes No **DQA:** _____ **Date:** _________

QA: N/C Closed: _____ **Date:** _________

NCR:	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	37980
Description: Crosstube Assembly (206B High Fwd)	Part Number:	D206-667-141
Inspection Dwg: D206-667-141 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [ ] Prototype

	Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.240	+0.005/-0.000	2.244	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.114	+0.005/-0.000	2.117	✓			
	2.154	+0.005/-0.000	2.155	✓			
	2.194	+0.005/-0.000	2.198	✓			
	2.234	+0.005/-0.000	2.238	✓			
	0.110	+/-0.010	.110	✓			
	0.300 x 30°	+/-0.010	.300	✓			
	R0.063	+/-0.010	.063	✓			
	R0.500	+/-0.010	.500	✓			
	4.438	+/-0.030	4.438	✓			
SIDE B	2.240	+0.005/-0.000	2.243	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.074	+0.005/-0.000	2.078	✓			
	2.114	+0.005/-0.000	2.118	✓			
	2.154	+0.005/-0.000	2.156	✓			
	2.194	+0.005/-0.000	2.196	✓			
	2.234	+0.005/-0.000	2.236	✓			
	0.110	+/-0.010	.110	✓			
	0.300 x 30°	+/-0.010	.300	✓			
	R0.063	+/-0.010	.063	✓			
	R0.500	+/-0.010	.500	✓			
	4.438	+/-0.030	4.438	✓			
	93.18	+/-0.020	93.17	✓			

Measured by:	[signature]	Audited by:	[signature]	Prototype Approval:	N/A
Date:	08.04.04	Date:	08/04/04	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.10.24	New Issue (P/O D206-667-101)	KJ/JLM [signature]	[signature]

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED DS	APPROVED DS	DRAWING NO. D206-667-141 REV. B SHEET 1 OF 3
DATE 05.07.26		TITLE CROSSTUBE ASS'Y (206B HIGH FWD) SCALE NTS

REV		DATE	DESCRIPTION
A		00.11.17	NEW ISSUE
B		05.07.26	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BHT/AA SKIDTUBES

RELEASED 05.07.26

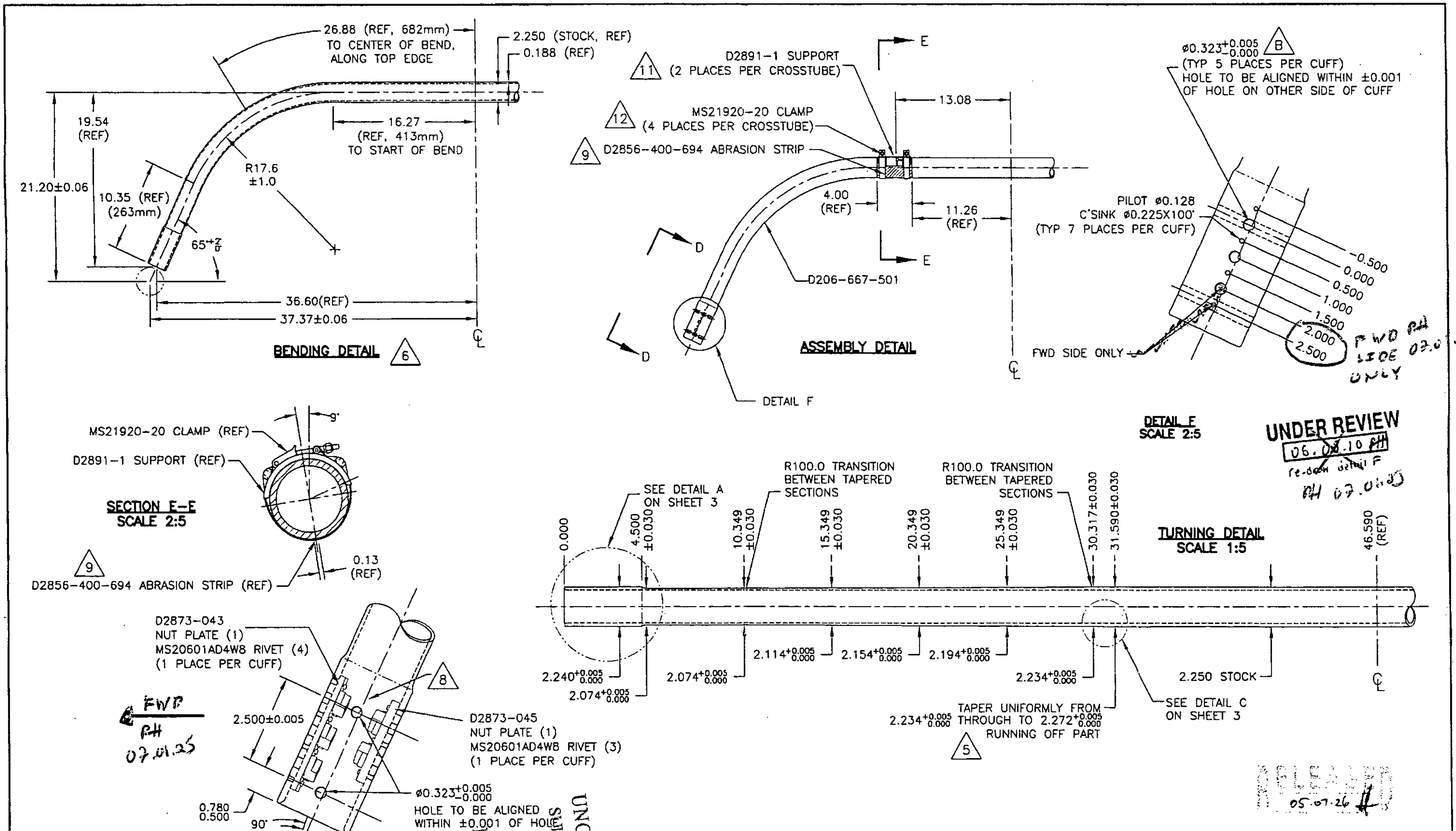
UNDER REVIEW 06.08.10 PH
re.draw detail F
PH 07.01.25

Qty	Part Number	Description
X	D206-667-141	CROSSTUBE ASSEMBLY (206B HIGH FWD)
1	D6001-105	CROSSTUBE
2	D2856-400-694	ABRASION STRIP
2	D2873-043	NUT PLATE
2	D2873-045	NUT PLATE
2	D2891-1	SUPPORT
14	MS20601AD4W8	RIVET (OR NAS9302B-4-8)
4	MS21920-20	CLAMP

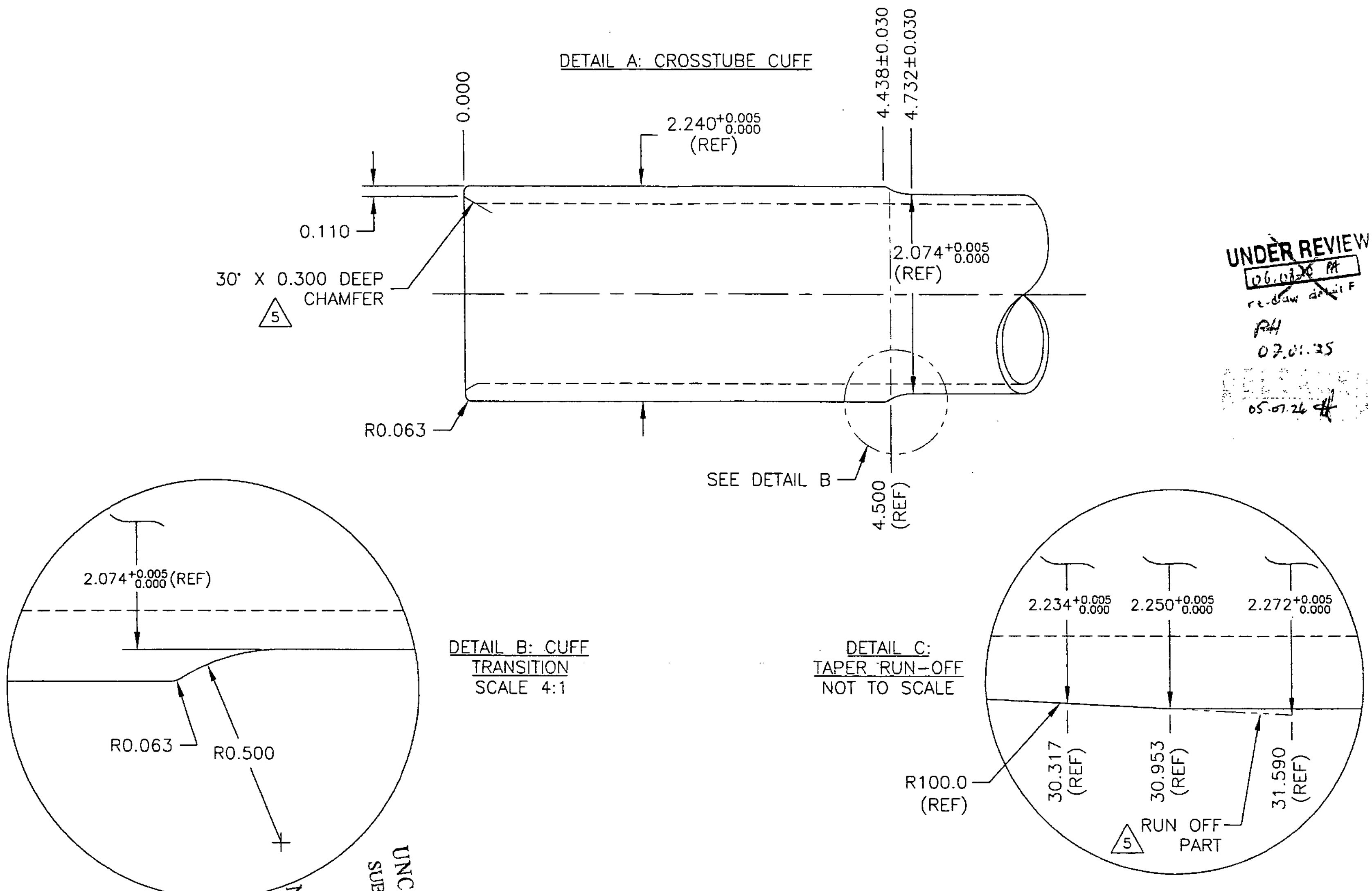
SHOP COPY
RETURN TO
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UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 37980

GENERAL NOTES:

1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
2) MATERIAL: MANUFACTURED FROM D6001-105
   FINISHED LENGTH = 93.18±0.020
3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
   PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
   PAINT OUTSIDE PER DART QSI 005 4.2
4) PART IS SYMMETRIC ABOUT CENTERLINE.
5) RUN-OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
6) BEND PROGRESSIVELY WITH A MINIMUM OF 12 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
7) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
8) SCRIBE DART PART NUMBER AND BATCH NUMBER IN THIS AREA WITH VIBRATING STYLUS.
9) INSTALL D2856-400-694 ABRASION STRIP WITH A 0.13 (REF) GAP ON BOTTOM SIDE OF CROSSTUBE, CENTERED OPPOSITE D2891-1 SUPPORT, PER QSI 035.
10) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
11) IT IS OPTIONAL TO SEAL EDGES OF SUPPORTS AND ABRASION STRIP USING SIKAFLEX-241/291 SEALANT.
12) TORQUE CLAMPS 80 TO 100 IN-LB.



	DESIGN	DRAWN BY		
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	DATE 05.07.26		TITLE CROSSTUBE ASS'Y (206B HIGH FWD)	SCALE 1:10



DESIGN	DRAWN BY
PH	PH
CHECKED: DS	APPROVED: DS
DATE: 05.07.26	

DART — DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D206-667-141 — REV. B — SHEET 3 OF 3

TITLE: CROSSTUBE ASS'Y (206B HIGH FWD) — SCALE 1:1